

Progression in ICT

Technology – Datalogging

Year 1 & 2	Year 3 & 4	Year 5 & 6
<ul style="list-style-type: none"> Participate in whole class demonstrations on an IWB using a data logger and monitoring live data, e.g., changing sound levels over time. Develop an awareness of datalogging through the use of various peripheral devices, e.g., thermometers, microscopes and microphones. 	<ul style="list-style-type: none"> Use dataloggers to capture record and analyse data continuously over time, including sound, temperature and light. Use a data logger to 'snap shot' a series of related but separate readings in the course of an appropriate investigation. Use data loggers both connected to the computer (live) and remotely, transferring to appropriate software at a later stage. 	<ul style="list-style-type: none"> Use a datalogger's pre-programming features to log data over a chosen time span (perhaps overnight). Use a range of external sensors including heart rate monitors, in a variety of scientific investigations. Use a datalogger to make and record accurate measurements and produce graphical information to answer questions and solve simple problems. Be able to design experiments which require use of dataloggers, recognising what measurements will be needed, how many repeats and the most appropriate means of recording data.

Technology – Logo and Control

Year 1 & 2	Year 3 & 4	Year 5 & 6
<ul style="list-style-type: none"> Give and follow commands (one at a time) to navigate other children and programmable toys around a course or a familiar journey, including straight and turning movements. Plan, generate and follow a sequence of commands (actual and on-screen) to complete a given task or problem. Explore and create a sequence of commands to reproduce a simple shape/ pattern on screen. Make predictions when controlling devices and describe the effects. Make changes to improve the effectiveness of commands 	<ul style="list-style-type: none"> Plan, create, test and modify sequences of commands to solve open ended problems using a roamer, onscreen or other programmable devices. Use more advanced Logo programming, including penup/pendown, and repeat commands to create, test, modify and refine sequences, e.g., more complex symmetric and repeating geometric patterns. Create simple flow diagrams or pictorial sequences of commands using appropriate tools/software. Refine these sequences of commands to control physical devices using outputs only, e.g., lighting sequences, buzzers and motors (This could include real devices and/or on screen simulations). 	<ul style="list-style-type: none"> Create and refine sequences of commands using Logo programming, including the use of procedures, e.g., to construct and investigate geometric patterns and problems. Plan, create, test, modify and refine control sequences which use inputs and outputs, e.g. using if... then... commands to control events (real and simulation) taking account of purpose/needs. Make predictions regarding the consequences of decisions when creating sequences of commands. Devise, test and refine more effective control sequences incorporating conditional statements, procedures and sub-routines, taking account of purpose and needs.